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| EXAMINER | |
|---|---|
| THAKUR, VIREN A | |
| ART UNIT | PAPER NUMBER |
| 1794 | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

pto-sl@huschblackwell.com

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/710,290 | MCFARLANE ET AL. | |
| | Examiner | Art Unit | |
| | VIREN THAKUR | 1794 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-46* is/are pending in the application.

4a) Of the above claim(s) *27-30 and 47* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26 and 31-46* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 June 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *8/16/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election with traverse of claims 1-26 and 31-46 in the reply filed on April 24, 2008 is acknowledged. The traversal is on the ground(s) that groups I, II and III are closely related and have a common utility. Specifically, applicant asserts that the groups relate to exposing foodstuffs to an environment for preserving the foodstuff, and the claims of groups I, II and III do not pose a serious burden for the examiner by requiring separate searches. This is not found persuasive, since as claimed, the group of inventions have acquired a separate status in the art, requiring separate searches as shown by their different classification, restriction for examination purpose as indicated is proper. This is further evidenced by the distinctness of each group, since for instance the article or material worked on does not limit apparatus claims. Regarding the process and the product made, the product can be made without allowing partial penetration and as such would have been made by another and materially different process. Furthermore, the product by process claims are directed to a particular product and do not depend the particular method of production.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 27-30 and 47 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable

generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on April 24, 2008.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**4. Claims 1, 13, 41 and 44-46 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Claim 1 recites the limitation "at least partially penetrates." The claim is unclear as to how much penetration of the gas can be considered partial penetration into the structure of the foodstuff.

Claim 13 recites the limitation "any plurality of first vacuums and first flushes." It is noted that there can only be one first vacuum and first flush and thus to have a "plurality of first vacuums and first flushes" is not clear.

Claim 41 recites the limitation "wherein said flush of one or more gases includes the modified atmosphere for sealing the meat within the container." The claim is unclear as to how the flush of the gas can include the modified atmosphere, when independent claim 39, from which claim 41 depends recites releasing the flush of gas from the chamber. If the flush of gas is released, it is not clear as to how this flush of gas includes the modified atmosphere for sealing the meat within the container.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**6. Claims 1 and 43-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Weinke (US 3574642).**

Regarding claim 1, Weinke discloses a method for packaging a foodstuff which comprises placing the foodstuff in a chamber (Figure 2), and providing a flush of a gas, such as nitrogen (column 2, line 71 to column 3, line 11) and subsequently sealing the food stuff in the container (column 3, lines 12-14). Regarding the limitation of at least partially penetrating the structure of the foodstuff within a predetermined time, it is noted that since Weinke discloses providing the gas under pressure, that the gas would inherently have resulted in some degree of penetration into the structure of the foodstuff. This would further have been inherent since a vacuum is drawn, thus creating a pressure differential.

**7. Claims 1, 39-41, 43-44 and 46 are rejected under 35 U.S.C. 102(b) as being anticipated by Gorlich (US 5529178).**

Regarding claims 1, 39 and 43, Gorlich discloses packaging a foodstuff within a container, by placing the foodstuff in a chamber (Figure 4) and flushing gas into the foodstuff, under pressure (Column 3, lines 1-7 and lines 60-65) and then sealing the foodstuff in the container (column 4, lines 24-59). Regarding the limitation of at least partially penetrating the structure of the foodstuff within a predetermined time, it is noted that since Gorlich discloses providing the gas under pressure, that the gas would inherently have resulted in some degree of penetration into the structure of the foodstuff. This would further have been inherent since a vacuum is drawn, thus creating a pressure differential.

Regarding claim 40, it is noted that both Tamayama and Gorlich teach an anti-microbial gas, since the purpose of the gas is to enhance the shelf life of the meat.

Regarding claim 41, Gorlich teaches maintaining a gaseous atmosphere within the package for extending the shelf life of the meat product (see column 2, lines 3-7). To maintain a modified atmosphere within the package would therefore have been obvious for the purpose of enhancing the shelf life of the meat.

Regarding claim 46, Gorlish disclose wherein the meat is chicken (column 1, line 15).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**10. Claims 1, 39-41, 43 and 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamayama (JP 05003752) in view of Gorlich (US 5529178).**

Regarding claim 1, Tamayama teaches improving the color of meat and keeping the freshness of meat by placing meat into a chamber, closing the chamber and introducing a first flush of gas, such as carbon monoxide, within the chamber 9See paragraph 0008, 0011, 0015, 0016, 0019 and 0023). Tamayama in paragraph 0011 teaches that the carbon monoxide treatment can be just before packaging of the meat and the carbon monoxide is absorbed into the meat. The carbon monoxide controls the conversion of myoglobin to metmyoglobin, as discussed in paragraph 0019. Tamayama further teaches flushing the first gas (i.e. carbon monoxide) from contact with the food product, as well (paragraph 0008).

Claim 1 differs from the prior art in specifically reciting wherein the fresh meat is placed into a container and then exposed to the first flush of gas.

Gorlich also teaches placing the meat in a container and exposing the meat within the container to a flush of gas, and subsequently sealing the container, as discussed above.

To therefore place the meat within a container and then place the container into a chamber to be exposed to gas and subsequently sealing the container, would therefore have been obvious to the ordinarily skilled artisan for the purpose reducing the number of steps required to package the meat for retail sale.

Regarding claim 39, Tamayama teaches flushing a chamber with a mixture of gases, exposing the meat to the gas for a predetermined period of time at elevated temperatures (paragraph 0013) and then flushing the gas prior to sealing a package (paragraph 0008). Gorlich (US 5529178) is relied on to teach the conventionality of flushing gas into a container that comprises a meat product already therein, as discussed above with respect to claim 1.

Regarding claim 40, it is noted that both Tamayama and Gorlich teach an anti-microbial gas, since the purpose of the gas is to enhance the shelf life of the meat.

Regarding claim 41, Gorlich teaches maintaining a gaseous atmosphere within the package for extending the shelf life of the meat product (see column 2, lines 3-7). To maintain a modified atmosphere within the package would therefore have been obvious for the purpose of enhancing the shelf life of the meat.

Regarding claim 43, Tamayama teaches a foodstuff exposed to a flush of a gas, under pressure that penetrates into the foodstuff, as discussed above with respect to claims 1 and 2.

Claim 43 differs in specifically reciting wherein a vacuum is pulled during packaging.

It is noted that Gorlich teaches drawing a vacuum during packaging (column 4, lines 4-8, 32-41) and subsequently sealing the container (column 4, lines 50-53). Based on the teachings of Gorlich, it would have been obvious to draw a vacuum during packaging for the purpose of evacuating any air surrounding the food, which would have prevented discoloration of the food product.

Regarding claims 44-46, it is noted that Tamayama teaches the conventionality of treating meat products such as poultry and fish to a gas treatment (See abstract).

**11. Claim 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims 1, 39-41, 43 and 44-46, and in further view of Palmer (US 6054161).**

Claim 34 differs in specifically reciting using ports to introduce the gas into the chamber.

Regarding claim 34, Palmer teaches using ports, such as item 17 in figure 1. Regarding the simultaneous introduction of one or more gases via a second port, it is noted that Tamayama teaches that a mixture of gases can be introduced into the package (paragraph 0016). Whether the ordinarily skilled artisan used one port with a mixture of gases or two separate ports for each of the gases would therefore have been an obvious matter of design and/or choice since the concept of introducing more than

one gas within a container for penetrating the surface of the food product has been well established in the art.

**12. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims, 1, 39-41, 43 and 44-46, above, and in further view of Beebe, Jr (US 3122748) and Mercogliano et al. (US 6521275).**

Claim 42 differs from the combination of the prior art in specifically reciting wherein a vacuum is pulled after flushing of the gas and vacuum sealing the meat within the container.

It is further well known in the art, as evidenced by Beebe, Jr. that vacuum packaging can result in improved storage life of a meat package that was subsequently treated and flushed with a gas. Beebe, Jr., teaches in table 1 on column 3, that vacuum packaged products have a minimal rate of oxygen transmission and thus resulted in the longest stable shelf life. Mercogliano et al. similarly teach vacuum packaging the meat after flushing with a gas for the purpose of retaining the fresh appearance for a prolonged period of time (Column 4, lines 3-7). To therefore vacuum package the product would have been an obvious since the art recognized the conventionality of vacuum packaging meat after gas flushing and further recognized improved storage of packaged meats that have been vacuum packaged.

**13. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamayama (JP 05003752) in view of Gorlich (US 5529178) and in further view of Shaklai (US 6042859) and Palmer (US 6054161).**

Regarding claim 2, Tamayama teaches improving the color of meat and keeping the freshness of meat by placing meat into a chamber, closing the chamber and introducing a first flush of gas, such as carbon monoxide, within the chamber 9See paragraph 0008, 0011, 0015, 0016, 0019 and 0023). Tamayama in paragraph 0011 teaches that the carbon monoxide treatment can be just before packaging of the meat and the carbon monoxide is absorbed into the meat. The carbon monoxide controls the conversion of myoglobin to metmyoglobin, as discussed in paragraph 0019. Tamayama further teaches flushing the first gas (i.e. carbon monoxide) from contact with the food product, as well (paragraph 0008).

Claim 2 differs from the prior art in specifically reciting wherein the fresh meat is placed into a container and then exposed to the first flush of gas.

Gorlich also teaches placing the meat in a container and exposing the meat within the container to a flush of gas, and subsequently sealing the container, as discussed above.

To therefore place the meat within a container and then place the container into a chamber to be exposed to gas and subsequently sealing the container, would therefore have been obvious to the ordinarily skilled artisan for the purpose reducing the number of steps required to package the meat for retail sale.

Claim 2 further differs from the combination of the prior art in specifically reciting subjecting the container to a first vacuum and then introducing a first flush of the gas into the container and holding the gas within the container for a predetermined amount of time.

Shaklai has been further relied on to teach the conventionality of improving penetration of the carbon monoxide within the meat by first removing the air using a vacuum (column 7, line 15-22) and then filling the container with carbon monoxide (column 7, lines 22-23). Removing the air within the container aides in removing any oxygen within the package, which could result in the degradation of the meat. The pressure differential aides in allowing the carbon monoxide to fully penetrate the meat product and thus retain the meat's color (column 7, lines 24-28 and lines 40-47). To therefore subject the container of modified Tamayama to a vacuum prior to flushing with the carbon monoxide would have been obvious for the purpose of removing any air and thus oxygen, which could degrade the color of the meat. Such a modification would have ensured complete contact with carbon monoxide.

Claim 2 further differs from the combination of the prior art in specifically reciting introducing a second flush of one or more gases within said chamber for a period of time and sealing said meat within the container.

Palmer has been relied on to teach gas flushing of a packaged meat product using several vacuum withdrawals and subsequent pressurizations for the purpose of achieving the desired controlled environment within the chamber (column 6, lines 10-19). As a result, the amount of oxygen present within the container is less than 500

ppm, which is below the range disclosed by applicant on page 3, paragraph 0004 of the specification, that results in metmyoglobin formation. The gas flushing also results in pressurization that allows the meat to successfully absorb the gases (column 6, line 32-64). To therefore flush the container of modified Tamayama with a second gas and then seal the container of modified Tamayama with the second flush of gas would have been obvious to the ordinary skilled artisan for the purpose of creating an oxygen free controlled environment within the packaged meat container.

Claim 3 differs form the combination of the prior art in specifically reciting wherein the gas introduced during the second flush is the same as the gas introduced during the first flush. It is noted that Palmer teaches subsequent gas flushing using the same gas, for the purpose of achieving the desired controlled environment within a chamber. To therefore use the same gas would have been obvious to the ordinarily skilled artisan for maintaining a desired controlled environment within the container.

Regarding claim 4, Tamayama teaches using carbon monoxide during the first gas flush, as discussed above.

**14. Claims 5-6, 9, 11-14, 32-33, 35-37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamayama (JP 05003752) in view of Gorlich (US 5529178), and in further view of Palmer (US 6054161) and Shaklai (US 6042859).**

Tamayama, Gorlich, Palmer and Shaklai are taken as applied above to claim 2.

Claims 5-6, 14, 32-33, 35 and 38 differ from the prior art in specifically reciting the combination of a first vacuum, first flush, second vacuum and second flush.

It is noted that Palmer has been relied on to teach multiple vacuum and subsequent gas flushing for the purpose of achieving the desired controlled environment within the container (Column 6, lines 10-19 and column 7, lines 27-34).

To therefore have multiple vacuum and subsequent flushing steps would have been obvious, based on the Palmer reference, for the purpose of minimizing the amount of oxygen within the container and achieving the desired controlled environment within the chamber, as well as absorption of the gas into the meat. Regarding the limitations of stopping the vacuum, it is noted that Palmer teaches the stopping of the vacuum and then flushing with a gas, since Palmer says drawing the vacuum and subsequent flushing (column 6, lines 10-13).

Further regarding claim 6, it is noted that Palmer teaches achieving a desired pressure within the chamber for the purpose of allowing for absorption of gas into the meat (column 6, lines 45-53). Therefore by recognizing the need for multiple gas flushes and pressure within the container for absorption of the gas into the meat, Palmer teaches achieving a predetermined pressure during each of the flushing steps.

Claim 11 differs in specifically reciting wherein the meat is held within the environment of the first flush for no more than 10 minutes.

It is noted that Shaklai teaches pressurized introduction of a gas into the meat for the purpose of impregnating the meat with the gas. The amount of time for exposure varies depending on the type of meat and the size of the meat (column 7, lines 52-55), however, Shaklai teaches that the preferred time of 5 minutes (column 7, line 50) but recognized that different sizes of meat would require different exposure times.

To therefore employ a particular exposure time to the first flush of gas would have been an obvious result effective variable, routinely determinable for the purpose of achieving the desired penetration of the first gas into the meat.

Regarding claims 9 and 12, Palmer teaches multiple flushes of a gas to achieve the desired pressure, above atmospheric pressure, for the purpose of having the volume of gas available that would not normally be present at ambient pressure (column 6, lines 45-49). This teaches above atmospheric pressure. To therefore employ above atmospheric pressure would have been obvious to the ordinarily skilled artisan for the purpose of ensuring absorption of the gas into the meat, for long term preservation.

In light of the rejection under 112, second paragraph, above, it is noted that Palmer teaches multiple flushes of the gas for achieving the desired controlled environment, as recited in claim 13.

Further regarding claim 36, it is noted that Palmer teach subsequent flushes with carbon dioxide, which is a well known antibacterial gas.

Regarding claim 37, it is noted that Palmer teaches that subsequent flushes of the gas are desired for the purpose of achieving the desired controlled environment. Nevertheless, if the first flush achieved the desired controlled environment within the package, then the subsequent flushes would not have been necessary. To therefore have the first flush include the modified atmosphere within the container would have been obvious to the ordinarily skilled artisan based on the desired controlled atmosphere within the container.

**15. Claims 16-18, 20-26 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims above, and in further view of Canfield (US 3910009).**

Regarding claims 16, 23-26 and 31, the concept of pulling multiple vacuums and multiple flushes of a gas for creating a modified atmosphere within the package are applied as discussed above with respect to the Palmer reference.

Claims 16, 23-26 and 31 differ from the combination of the prior art in specifically reciting wherein the vacuum is not stopped and a subsequent gas is flushed into the chamber.

Canfield has been relied on to teach the conventionality of continuous vacuum and flushing, as evidenced on column 5, lines 21-25. Using a continuous vacuum and gas, Canfield forgoes the need for shutoff valves.

To therefore use continuous vacuum would therefore have been an obvious matter of design and/or choice, since the prior art teaches continuous supply of vacuum and gas for a continuous gas flushing operation. Such a modification would have further improved the efficiency of the process since a continuous operation would have required less equipment, such as additional shut off valves, for example. Additionally, the continuous process would have resulted in faster production of exposing the food to a modified atmosphere.

Claim 17 differs form the combination of the prior art in specifically reciting wherein the gas introduced during the second flush is the same as the gas introduced during the first flush. It is noted that Palmer teaches subsequent gas flushing using the

same gas, for the purpose of achieving the desired controlled environment within a chamber. To therefore use the same gas would have been obvious to the ordinarily skilled artisan for maintaining a desired controlled environment within the container.

Regarding claim 18, Tamayama teaches using carbon monoxide during the first gas flush, as discussed above.

Regarding claims 20-21, it is noted that the pressure within the chamber, as taught by Palmer and Shaklai, would inherently have been raised as a result of the introduction of the gas, since the gas results in increased pressure, as discussed above. The only point at which the chamber has a raised pressure would have been at the point of the introduction of a pressurized gas and therefore, both Palmer and Shaklai teach a pressure above the chamber pressure, as recited in claim 20 and also raising the chamber pressure as a result of the introduction of the gas, as recited in claim 21.

Further regarding claim 22, it is noted that Palmer teach subsequent flushes with carbon dioxide, which is a well known antibacterial gas.

Regarding claim 23, it is noted that Palmer teaches that subsequent flushes of the gas are desired for the purpose of achieving the desired controlled environment. To therefore employ a particular number of flushes would have been routine determinable by experimentation for achieving the optimal modified atmosphere to enhance the shelf life of the meat product.

Claim 26 is rejected for the reasons discussed above with respect to claim 34, in view of the Palmer reference. Palmer teaches using ports, such as item 17 in figure 1. Regarding the simultaneous introduction of one or more gases via a second port, it is

noted that Tamayama teaches that a mixture of gases can be introduced into the package (paragraph 0016). Whether the ordinarily skilled artisan used one port with a mixture of gases or two separate ports for each of the gases would therefore have been an obvious matter of design and/or choice since the concept of introducing more than one gas within a container for penetrating the surface of the food product has been well established in the art.

**16. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims 5-6, 9, 11-14, 32-33, 35-37 and 38, above, and in further view of Engler et al. (US 5458901).**

Claim 10 differs in specifically reciting wherein the pressure in the chamber is at least 250 psi.

It is noted that Tamayama, Shaklai and Palmer all teach impregnating the surface of a meat product with a gas for the purpose preserving the color of the meat by binding the myoglobin. Tamayama, Shaklai and Palmer teach using increased pressure. Specifically, Shaklai and Palmer teach that the increased pressure aids in penetration of the gas into the meat. Nevertheless, Engler et al. has been relied on to further teach the conventionality of the concept of increasing the pressure to above 250 psi, in order to facilitate penetration of a gas into a meat product (column 2, lines 25-34). To therefore increase the pressure to at least 250 psi would have been obvious for the purpose of facilitating the penetration of the gas into the meat.

**17. Claims 7-8 and 15, are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claim 10, above, and in further view of Graves (US 2629311).**

Regarding claims 7-8 and 15, it is noted that the prior art to Shaklai, Palmer and Canfield all teach the conventionality of drawing a vacuum prior to flushing the container, which comprises a food product therein, with a gas. As discussed above, Engler et al. also teach using a pressure differential to facilitate penetration of a gas into a meat product.

Claims 7-8 and 15 differ from the combination of the prior art in specifically reciting a particular amount of vacuum pulled during the packaging process.

Graves has been further cited to teach that it has been well known in the art to employ superatmospheric pressures and a vacuum, in combination, for the purpose of facilitating better entry of a preserving material into the air voids of the meat (column 1, lines 3-17). In particular, Graves teaches using 20 inches of vacuum (column 2, line 21). It is noted that applicant uses a particular level of vacuum for the purpose of creating this pressure differential, in order to allow for better entry of the gas into the meat, as indicated on page 27, paragraph 0031 of applicants' specification. Additionally, it is noted that the pressure differential would also depend on the amount of overpressure of the gas to which the meat was exposed. For instance, a higher over pressure with less vacuum would have been expected to work similarly to a lower over pressure with higher vacuum. In both cases, the pressure differential would have been similar. Where the general conditions of a claim are disclosed in the prior art, it is not

inventive to discover the optimum or workable rangesby routine experimentation. Therefore, absent any clear and convincing evidence to the contrary, since the prior art to Shaklai, Palmer and Canfield all teach the conventionality of a vacuum and overpressure, and since Shaklai and Palmer also similarly teach impregnating the meat with a preserving gas using over pressure and vacuum, the particular level of vacuum that has been pulled would have been an obvious result effective variable, routinely optimized through experimentation for the purpose of achieving the desired pressure differential for optimal absorption of the gas into the meat.

**18. Claim 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims 16-18, 20-26 and 31, above, and in further view of Graves (US 2629311).**

Claim 19 differs from the combination of the prior art in specifically reciting a particular amount of vacuum pulled during the packaging process.

The particular amount of vacuum being pulled is rejected for the reasons discussed above with respect to claims 7-8 and 15.

***Conclusion***

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VIREN THAKUR whose telephone number is (571)272-6694. The examiner can normally be reached on Monday through Friday from 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571)272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/V. T./
Examiner, Art Unit 1794

/KEITH D. HENDRICKS/

Supervisory Patent Examiner, Art Unit 1794